Rhodora

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Rhodora

JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 13. May, 1911. No. 149.

BOTANIZING IN CENTRAL CONNECTICUT.

Emma J. Thompson.

Eighteen years ago, when we first visited Pine Swamp, a grove of noble trees (*Pinus Strobus*) gave meaning to the name. These trees were cut half a dozen years or more ago, and though their absence changes the character of this region somewhat, still it is a place rich in possibilities for the botanist.

This particular Pine Swamp (we understand several other places in the state bear that name), is located in the towns of Cromwell and Rocky Hill, Connecticut, about a mile west of the Connecticut River. Its centre is a long, narrow, low-lying strip of sphagnum marsh, so level that the cold sluggish brook that drains it makes many long curves and loops. Here and there, in the more treacherous part of the bog, are a number of sunken places filled with dark, still water, each pool only a few feet in diameter and so regular in outline as to suggest it may have been cut out for some purpose of man. Stained black by the roots decaying moss and leaves, the water gives one the impression of mystery and infinite depth. Here the shrubs and young growth are so thick overhead, the weeds and ferns so rank beneath and the brook so twisting in its course, that one may wander for hours over the same few rods of ground, unless provided with a compass. Here in the heart of the swamp we find

Habenaria blephariglottis (Willd.) Torr., one of the most beautiful of its genus. A few of these plants have held this station for many years. Our first specimen was taken in 1894, and this past summer Mr. C. H. Bissell found a single plant.

Habenaria fimbriata (Ait.) R. Br. occurs frequently along the brookside.

Corallorrhiza trifida Chatelain was growing in quite a colony under hemlocks.

Microstylis unifolia (Michx.) BSP., only two specimens found.

Smilacina trifolia (L.) Desf. There are rather large areas of this surrounding the little pools. It is one of the swamp plants that seems to have increased since we first collected it here.

Clintonia borealis (Ait.) Raf. flourishes here.

Calla palustris L. covers one section of the brook.

Arisaema triphyllum (L.) Schott. In a very shady wet place, quite a colony of plants showed peculiarities that suggested its close relation to *A. Dracontium.* Each plant was quite strict in growth, the spathe slender and more erect at the summit than is usual in the type. The leaves were five-parted.

Solidago Elliottii T. & G. Two or three plants were growing in a rather open wet place.

Utricularia clandestina Nutt. completely filled one of the little pools to the exclusion of all other growths. Not a trace of the plant could be found in any of the near-by pools.

Nemopanthus mucronata (L.) Trel., lover of cold shady swamps, finds a congenial home here, and adds to the overhead tangle.

Sarracenia purpurea L. has been reported from this region, but we have not found it.

Carex subulata Michx. we suppose may, from the botanist's standpoint, be called the chief treasure of the swamp. It seems to be quite abundant here and we might wonder why it should be so rare when its facility in fastening its mature seeds on the clothing can be so well demonstrated by lightly brushing past a clump of it.

Stellaria borealis Bigel. grows in masses in and near the brook.

So much for the deepest part of the swamp. As we push through the bewildering tangle and come to the foot of the knoll, once inhabited by the pines, we find a profusion of

Lygodium palmatum (Bernh.) Sw. twining over the weeds and bushes and even clothing some of the old stumps with its delicate beauty. This fern has increased very much in the past years.

Aspidium simulatum Davenp. has been collected here by Messrs. Bigelow and Bissell, and is reported as quite abundant in some parts of the bog.

Linnaea borealis L. var. *americana* (Forbes) Rehder formed a thick mat over the roots of one of the old pine stumps. This was our great-

est find during the past season, as it is very rare in this state and we had seen it growing only once before — in Maine.

Rhododendron canadense (L.) BSP. has also increased amazingly since the destruction of the pines and now forms little thickets on the higher land bordering the marsh. Its being so much in evidence suggests a new name for this region — Rhodora Swamp!

As we emerge into the pasture lands we find a few small bogs, and on the edge of one of these

Lycopodium inundatum L. grows in rather a stunted fashion in one small colony.

On our way to North Cromwell Station, the swamp left well behind, we pass two or three small ponds and extract from them *Marsilea quadrifolia* L. possibly introduced from Bantam Lake, at one time its only known habitat in America.

Ceratophyllum and *Elodea* nearly choked one pond with their tangle, the former with its finely dissected leaves, and the latter dotting the surface of the water with its tiny blossoms not much larger than pin-heads.

In a neighboring pasture one of the party discovered many fine specimens of that elusive but not rare little fern *Ophioglossum vulgatum* L.

Referring to the Catalogue of the Flowering Plants and Ferns of Connecticut, we find of the species mentioned in these notes, one (*Carex subulata*) has not been recorded; thirteen are set down as "rare," and several others as "occasional" or "local." Considering that most of the choicest specimens were found in a spot of but a comparatively few rods in radius, it seems as if Pine Swamp — or as we would like to call it, *Rhodora Swamp* — in Central Connecticut were worthy of more than a passing notice.

Hartford, Connecticut.

PTELEA MOLLIS VAR. CRYPTONEURA, A WAFER-ASH OF THE GEORGIA SAND-HILLS.

Harley Harris Bartlett.

In the winter of 1907 I sent to a considerable number of correspondents specimens of a wafer-ash from the fall line sand-hill region near Thomson, Georgia. Field observation had convinced me that it was not *Ptelea trifoliata*, neither did it correspond with any of the descriptions which had recently been published by Greene, Small, or Heller. Because of the descriptive appropriateness of the name, which had been given in 1849 by M. A. Curtis to a plant of North Carolina, I distributed my material as *Ptelea mollis*. The Biltmore Herbarium had previously sent out specimens from Wrightsville Sound, North Carolina (near Wilmington, the type locality of *Ptelea mollis*), which accorded with Curtis's original description but differed in several regards from my Georgian specimens.

The original publication of *Ptelea mollis* by Curtis [1] was as follows:

"Ptelea mollis, *n. sp.*— P. trifoliata, β mollis, *Torr. & Gray*? I. 680. Lateral leaflets oval, the terminal obovate, with an abrupt acute point, the under side with the petioles, panicles and young branches, clothed with a soft whitish silky villus; cymes compact, with short branches; style long; filaments equalling the anthers.— Wilmington, N. Car. Also, Newbern, N. C., *George Wilson, Esq.*: the low country of S. Car.; *Rev. T. J. Young.*

The style in this species is twice as long as in P. trifoliata, while the filaments are only about one third or one fourth as long. The mature leaves are much more rigid. With the exception of the style, this plant is much smaller in all its parts, and the sepals [are] very deciduous. Flowers tetrandrous."

Although Curtis described his plant as a *new species*, he took its name from the older *Ptelea trifoliata β mollis* T. & G. Since he himself questioned the synonym, we may compare his diagnosis with that of Torrey and Gray [2]:—

"*Ptelea trifoliata* . . . . β *mollis*: branchlets, petioles, and lower sur-

[1] New and Rare Plants, chiefly of the Carolinas, M. A. Curtis. Am. Journ. Sci. ser. 2, vii. (1849), p. 406.

[2] Fl. i. (1840), p. 680.

face of the leaves clothed with a soft tomentose pubescence, even when old. (Texas, *Drummond*!)"

It is obvious that there is scant evidence for considering the two names synonymous. If they are, it will be necessary to find another name for a plant of the Great Lake region (collected by the late Prof. C. F. Wheeler at Saugatuck, Michigan, and by Mr. C. C. Deam near Michigan City, Indiana, No. 7087, 31 July, 1910) which is now called [1] *P. trifoliata* var. *mollis* T. & G., but which is clearly different from *P. mollis* M. A. Curtis. Under the circumstances, there can hardly be any valid objection to maintaining both *P. mollis* M. A. Curtis (excl. syn.) and *P. trifoliata* var. *mollis* T. & G.

In his diagnoses of Ptelea species, Dr. Greene [2] has laid much stress upon the nervation of the samara. " . . . .This seed-bearing body is in some [species] marked by rather closely parallel transverse ridges, with lines of gland dots running between them, or else the ridges are irregularly broken and run into a reticulation, with one or more dots in the middle of each mesh. In either instance the ridges may, at the edge of the body or a little beyond it, unite to form a wall more or less definitely surrounding the body — which wall I denominate the circumvallation — or they may pass directly into the reticulation of the wing itself, leaving the body without circumvallation." It is in this character which Dr. Greene calls the "circumvallation" that both *Ptelea trifoliata* var. *mollis* (Mr. Deam's material from the sand dunes of northern Indiana) and *P. mollis* M. A. Curtis differ from the Georgian shrub which is here proposed as *P. mollis* var. *cryptoneura*.

In the one case we have typically "circumvallate" samaras, with strongly marked transverse ridges on the body; in the other case there seems to be no "circumvallation," and the transverse ridges of the body are altogether obscure. Since *Ptelea mollis* differs otherwise from its var. *cryptoneura* in merely trivial details, which might well be comprehended within the range of fluctuating variability of the species, my curiosity was aroused to find out whether or not there was actually a structural difference between them. Samaras of both types were boiled with caustic potash solution, in order to remove the softer tissues from the vascular framework. The two skeletons obtained could hardly have been told apart. In both, the longitudinal

[1] Gray's Manual, ed. 7, p. 537.

[2] The Genus Ptelea in the Western and Southwestern United States and Mexico, E. L. Greene. Cont. U. S. Nat. Herb. x. part 2 (1906), p. 51.

nerve, continuous with stipe and style, gives off parallel transverse nerves which anastomose at the edge of the body, forming a "circumvallation." In variety *cryptoneura* (so named because the fruit does not show the transverse body nerves and their anastomoses at the inner edge of the wing) the stipe of an unskeletonized samara shows but one nerve, notwithstanding the fact that the two lateral nerves are as well developed as in *P. mollis*, and can be exhibited by removing the overlying tissues. Since in these two plants the presence or absence of "circumvallation" depends upon the varying thickness of the loosely cellular tissue under the epidermis, I have not regarded it as of more than varietal worth.

Ptelea mollis var. **cryptoneura** var. nov. Frutex humilis patens, ramulis atro-purpureis, vetustioribus glabris, junioribus puberulis. Folia matura coriacea crenata, supra pallido-viridia sparsim crispo-pubescentia, subtus albicantia perdense pubescentia; foliolis ovatis apice acutiusculis, obtusis vel rotundatis, lateralibus basi abrupte angustatis; terminali lateralibus dimidio longiore, basi sensim angustato. Samarae 1.7–2.2 cm. longae, ovatae, vel fere orbiculares, apice emarginatae; centro nervos transversos et eorum confluentes ad alae insertionem solum obscurius exhibente, dense fusco-punctato; ala pallido-straminea sparsim punctata.— *Bartlett 951*, 1 Sept., 1907, and *1748*, 10 Aug., 1909, sand-hills and pine barrens near Thomson, McDuffie Co., Georgia. This variety differs from the specimens of *Ptelea mollis* distributed by the Biltmore Herbarium in the following minor points besides those already enumerated:— the leaflets are not abruptly acute at the apex; the body of the samara is more densely punctate; the samara is more nearly orbicular; the twigs are not glabrate until their second season.

Bureau of Plant Industry, Washington, D. C.

REPORTS ON THE FLORA OF THE BOSTON DISTRICT,— X.

In the genus *Scirpus* there are seven species or varieties which have been reported from only a single place, while numerous others have only a few known stations. Three or four of these are recent segregates, which have not been collected much since their characteristics

were pointed out, and two or three of the varieties are local forms not very frequent anywhere. This leaves about twelve which are distinctly rare in our section. A few of these are northern, but several of them seem to be stragglers from the pine-barren region further south. There is no reason why a careful search of the district should not reveal other ponds as rich as Winter Pond and Heard's Pond, but thus far the quest has not been successful. There are still numerous unexplored ponds in the district, and a large number just south of our borders. The questions of distribution raised by such facts as are stated here are most interesting, and should lead to more field work.

CYPERACEAE.

SCIRPUS.

S. americanus Pers. Mud and gravel near salt and fresh water. Abundant in eastern half of district, but only one station (Wayland) reported in western towns.

S. atrocinctus Fernald. Bogs and swales. Unreported from southeastern section, but fairly common elsewhere.

S. atrocinctus Fernald, var. **brachypodus** Fernald. Salisbury (*A. A. Eaton*, 1898); Amesbury (*A. A. Eaton*, Aug. 28, 1897); Reading (*C. E. Perkins*, July 12, 1882).

S. atrovirens Muhl. Andover (*A. S. Pease*, July 21, 1901); moist soil, Westford (*W. H. Manning*, Aug. 9, 1882); Medford Branch R. R., Medford (*Wm. Boott*, July 23, 1867); field, Medford (*Wm. Boott*, July 12, 1868); damp woods, Moose Hill, Sharon (*W. P. Rich*, July 12, 1896).

S. campestris Britton, var. **Fernaldi** (Bicknell) Bartlett. Kernwood, Salem, some specimens over five feet high (*J. Robinson*, July 27, 1879); banks of Mystic River, Medford (*Wm. Boott*, Aug. 23, 1859).

S. campestris Britton, var. **novae-angliae** (Britton) Fernald. Salt marsh, Ipswich (*J. H. Sears*, Aug. 24, 1886); Somerville (*C. E. Perkins*, Aug. 26, 1879); Watertown (*C. E. Perkins*, July 17, 1880); shallow water in brackish marsh, Scituate (*W. P. Rich & E. F. Williams*, Sept. 8, 1901).

S. campestris Britton, var. **paludosus** (A. Nelson) Fernald. Salt marshes, abundant along the coast.

S. cyperinus (L.) Kunth. Swamps and shores of ponds. Not

reported from northwestern portion of district, but apparently frequent elsewhere.

S. cyperinus (L.) Kunth, var. **Andrewsii** Fernald. Glacialis, Cambridge (*M. L. Fernald*, Oct. 16, 1905).

S. cyperinus (L.) Kunth, var. **condensatus** Fernald. Swamp east of Glacialis Pond, Cambridge (*H. H. Bartlett*, Oct. 17, 1905); railway near Hammond's Pond marshes, Newton (*Wm. Boott*, Aug. 23, 1884); burned place, low ground, Cliff Road, Wellesley (*K. M. Wiegand*, July 27, 1908); swamp, Hingham (*C. H. Knowlton*, Sept. 18, 1910).

S. cyperinus (L.) Kunth, var. **pelius** Fernald. Swamps, marshes and pond borders. Reported from several well-distributed stations, and probably common throughout.

S. debilis Pursh. Swamps and sandy shores of ponds. Frequent in central and northeastern portions of district.

S. debilis Pursh, var. **Williamsii** Fernald. Massapoag Pond, Sharon (*G. G. Kennedy*, Aug. 31, 1892; *E. F. Williams & M. L. Fernald*, Sept. 7, 1901; other collections since. This is the type station, and the plant has never been collected elsewhere. Published in Rhodora III, 252, 1901.

S. fluviatilis (Torr.) Gray. Ipswich River (*J. Robinson*, Aug. 22–23, 1876); Lawrence (*J. Robinson*, Sept. 26, 1877); Brighton (*C. E. Perkins*, June 30, 1879); in deep water, Heard's Pond, Wayland (*G. G. Kennedy*, Aug. 22, 1910).

S. georgianus Harper. Moist soil; frequent in northern and central portions, doubtless common throughout.

S. Hallii Gray. Sandy shore, Winter Pond, Winchester (*Wm. Boott*, Sept. 10, 1876. Numerous other collectors since). The only known station northeast of Georgia and east of Illinois.

S. heterochaetus Chase. Banks of Charles River at Cow Bay, Dedham (*F. F. Forbes*, Aug. 7, 1907).

S. hudsonianus (Michx.) Fernald. Wet meadows and peat-bogs, occasional in Essex and Middlesex counties. A northern plant, rare in our district.

S. Longii Fernald. Boston (*C. E. Faxon*, no date); swamp, Chamberlain lot, Dedham (*F. F. Forbes*, June 3, 1900); damp ground, Charles River meadows, Dedham (*F. F. Forbes*, June 26, 1908). A new segregate, to be looked for elsewhere in the district. See Rhodora XIII, 4, 1911.

S. nanus Spreng. Salt marshes and shores of tidal streams. Re-

ported from Gloucester to Watertown; also by fresh water at Spot Pond, Stoneham (*L. H. Bailey*, Aug. 1, 1883).

S. occidentalis (Wats.) Chase. In water near pond margins; Pleasant Pond, Wenham (*J. A. Lowell*, July, 1847); "Essex Co." (*Wm. Oakes*, no date); Revere (*H. A. Young*, September, 1878); Fresh Pond, Cambridge (*Wm. Boott*, July 9, 1853); Heard's Pond, Wayland (*G. G. Kennedy*, Aug. 22, 1910).

S. Olneyi Gray. Ditches in salt marsh, Kent's Island, Newbury (*A. A. Eaton*, Aug. 12, 1897).

S. pedicellatus Fernald. "Merrimac Valley" (*J. Robinson*, June 22, 1879). A northern species, rare in this district.

S. pedicellatus Fernald, var. **pullus** Fernald. Pleasant Valley, Amesbury (*A. A. Eaton*, Aug. 28, 1897); swampy shore, Coy's Pond, Wenham (*C. H. Knowlton*, Sept. 20, 1908).

S. planifolius Muhl. Dry open woods and rocky hillsides. Not reported from northwest or southeast, abundant elsewhere.

S. robustus Pursh. Salt marshes; Newbury (*E. F. Williams*, July 31, 1898); Dorchester (*J. R. Churchill*, Sept. 13, 1903).

S. rubrotinctus Fernald. Wet places, common throughout.

S. Smithii Gray. Muddy shores; Shawsheen River near pond, North Andover (*J. Blake*, September, 1883); Heard's Pond, Wayland (*M. L. Fernald*, Sept. 10, 1909; *M. L. Fernald & A. J. Eames*, Sept. 18, 1909. See Rhodora XI, 220, 1909); Westwood (*W. P. Rich*, Oct. 6, 1901).

S. subterminalis Torr. Ponds and slow streams, mostly submerged. Not reported in southern section, but frequent elsewhere.

S. sylvaticus L. Wet places; Lawrence, Andover, Revere, Woburn, Winchester, Sudbury.

S. Torreyi Olney. In shallow water and mud; Lawrence, Medford, Concord, Dedham, Ponkapaug Pond (Canton or Randolph), Wellesley; Groton, Westford, Stoneham, Littleton (according to Dame & Collins, Fl. Middlesex Co. 113, 1888).

S. validus, Vahl. In water of ponds and brooks, common.

C. H. Knowlton
J. A. Cushman
Walter Deane
A. K. Harrison
Committee on Local Flora.

SIMILARITY OF COLOR IN BUD AND IN LEAF.

Heyward Scudder.

During the last year I have noticed that the dominant color of the leaf-bud is the dominant color of the leaf after it has turned in the autumn. The most familiar examples of this are to be seen in the maples, particularly the swamp maple, and the willows. It is also true of the beeches, many of the rose family, and of the heath family as represented by the huckleberry and blueberries. The rhododendron, which is an evergreen, has green leaf-buds. In the case of the oaks the general color of the turned leaf is brown. But this varies so that the dominant color may be red (giving a red brown) or yellow (giving a yellow brown). So far as my observation goes the oak leaf-bud follows the principle just stated, varying as does the dominant color of the turned leaf.

If this fact is not already known, it is worthy of further observation. The nature and cause of the change of color of the leaf in autumn are better understood at present than they were formerly. But, as is the case with many of the problems of animal and of vegetable life, there is a great tendency to draw conclusions which are really statements of the problem in another form, the use of new words concealing the lack of advance in knowledge. (I admit that this is true in other branches of chemical work, but in them it is easier to get some sort of check on the accuracy and value of the work, than it is in the case of the chemistry of the changes connected with animal and vegetable life.)

There is no obvious reason why *Penicillium glaucum* in a mixture of dextro- and laevorotatory salts, should prefer one to the other, although able to use both, nor why one plant should use a considerable amount of silicon, when most plants use very minute amounts. The generalizations are difficult to reach, both because of the great variations produced by small changes in environment (whether terrestrial or atmospheric) and because of the limited amount of knowledge we actually possess.

While some plants are known to contain alkaloids, recent work makes it quite certain that these compounds are not fixed bodies, *e. g.* the alkaloid aconitine varies in composition, depending on the

species of the plant, and possibly on some local conditions of growth. The physiological effects of these different kinds of aconitine probably vary slightly, though all have the same general effect. Specific enzymes exist in many plants, but it is difficult to get much accurate knowledge about them, outside certain effects that they produce.

If enzymes are responsible for all color-changes in plants, this relation of the color of leaf-bud and of turned leaf is of interest. It would require a good deal of field work to verify the relation, but it certainly seems worthy of further study.

Boston, Massachusetts.

THE WINTER MEETING OF THE VERMONT BOTANICAL CLUB.

Nellie F. Flynn.

The sixteenth annual winter meeting of the Vermont Botanical Club was held at the Williams Science Hall, University of Vermont, Friday and Saturday, Jan. 20 and 21, 1911, in conjunction with the Vermont Bird Club. The sessions were interesting and well attended.

Twelve botanical papers were presented and discussed. The principal ones were "Botanical Trips in Western Louisiana," by Dr. Ezra Brainerd, illustrated by beautiful mounted specimens, "A Botanical Garden as Related to Botanical Work," by Dr. George P. Burns, illustrated by lantern slides of some European botanical gardens, "Sketch of the Work of the Poisonous Forage Plant Division of the Department of Agriculture in Colorado during 1910, by Willard W. Eggleston, and "Flora and Fauna of Hart Island," by Jay G. Underwood.

The annual supper, complimentary to the visiting members, was held as usual at the Y. M. C. A. Hall Friday evening. Post prandial exercises in the shape of the annual roll call, brought out many witty responses.

Sixteen new members were elected and on invitation it was decided to hold the next winter meeting at St. Johnsbury. The summer meeting will probably be at Mt. Horrid in Rochester the first of July.

Officers were elected as follows: Pres., Ezra Brainerd, Middlebury; Vice-Pres., C. G. Pringle, Burlington; Sec., G. P. Burns, Burlington; Treas., Mrs. Nellie F. Flynn, Burlington; Editor, G. L. Kirk, Rutland; Librarian, Miss Phoebe M. Towle, Burlington; Asst. Librarian, Miss Helen L. Hodge, Burlington; Committee on summer meeting, G. P. Burns, Burlington, G. L. Kirk, Rutland, and D. L. Dutton, Brandon. Committee on next winter meeting, Miss Delia I. Griffin, St. Johnsbury, J. G. Underwood, Hartland, and Mrs. Nellie F. Flynn, Burlington.

SOME INTRODUCED PLANTS OF CONNECTICUT.

Arthur E. Blewitt.

After one has exhausted about all the possibilities of his local flora, the waste grounds and dumping places are sources of keen enjoyment. No matter how often they are visited the unexpected is liable to happen and the discovery of some unknown plant, a waif or stray far from its known habitat, is a thing to be expected at any time. An old yard and dumping ground, perhaps an acre or more in extent, about a rubber reclaiming factory at Naugatuck, Connecticut, is a notable example and for its size a remarkable number of plants have been found there, most of them rare and many of them unknown in the state except at this place. Visiting this station is like being suddenly transported to a distant part of the country, to the Central Western States, for example, the transformation is so complete, with so many strange plants on every side. Only those of more than ordinary interest will be mentioned.

The grasses are poorly represented. *Panicum virgatum* L., a tall, handsome grass, is well established at one small station. *Setaria verticillata* (L.) Beauv. has been collected. The very handsome *Eragrostis megastachya* (Koeler) Link is in a thriving condition. The genus *Bromus* is represented by three species, namely, *B. tectorum* L., which is becoming well established in many places about the state, *B. squarrosus* L., which has been collected in considerable quantity but is not flourishing, *B. inermis* Leyss., well established in

one locality. *Agropyron tenerum* Vasey has been collected but is now probably extinct. *A. caninum* (L.) Beauv. is rare. The squirrel-tail grass, *Hordeum jubatum* L. grew there in abundance one season. *Elymus brachystachys* Scribn. & Ball, a grass of the far west has been collected, also another species not yet determined.

Of the *Polygonaceae* there are three representatives. *Rumex altissimus* Wood, a handsome species with pale green glaucous leaves, is well established. *R. mexicanus* Meisn. is rare. *Polygonum ramosissimum* Michx. has been collected. *Chenopodium urbicum* is well established, also *Atriplex patula* L., var. *hastata* (L.) Gray and *Salsola Kali* L., var. *tenuifolia* G. F. W. Mey. *Amaranthus blitoides* Wats. carpets the ground in several places. *Acnida tuberculata* Moq. and the strikingly handsome plant, *Oxybaphus nyctagineus* (Michx.) Sweet, were collected for several seasons. The *Cruciferae* are well represented. *Alliaria officinalis* Andrz. and *Berteroa incana* (L.) DC. have been collected. *Thlaspi arvense* L., *Brassica juncea* (L.) Cosson, *Lepidium apetalum* Willd., *Sisymbrium Loeselii* L., *S. Sophia* L., and *Camelina microcarpa* Andrz. are all established and more or less abundant. *Potentilla recta* L. and P. *intermedia* L. are in a flourishing condition. The two sweet clovers, *Melilotus alba* Desr. and *M. officinalis* (L.) Lam., are abundant and spreading, also *Vicia Cracca* L. A small station of *Convolvulus arvensis* L. is in a flourishing condition. *Cynoglossum officinale* L., with its peculiar-colored blossoms, has been collected each year. *Lithospermum arvense* L. has been collected in an adjoining field. *Verbena stricta* Vent., a tall, erect, and very handsome plant of the western plains, is well established and thriving. One plant of *Sideritis montana* L., a native of Southern Europe, was found the season of 1908. *Solanum carolinense* L., a vicious and persistent weed, is spreading. *Galium verum* L. has been collected several seasons but is not in a flourishing condition.

The composite family is well represented by a number of species and most of them are thriving. *Lactuca Scariola* L. and its closely related var. *integrata* Gren. & Godr. are spreading. The tall, rank, western weed, *Iva xanthifolia* Nutt., is well established. A few plants of *Xanthium spinosum* L. were found for several seasons. *Grindelia squarrosa* (Pursh) Dunal, a gummy plant, native of the western plains, has been collected several seasons. *Helianthus Maximiliani* Schrad. and *H. petiolaris* Nutt., two more western species, have been collected. *H. Maximiliani* persists. The Matricarias are well represented,

three of them having been collected, namely, *M. inodora* L., *M. Chamomilla* L., and *M. suaveolens* (Pursh) Buchenau. The Artemisias are also well represented, six having been collected as follows: *A. Dracunculus* L., *A. annua* L., *A. biennis* Willd., *A. frigida* Willd., *A. campestris* L., var. *pubescens* (Jord. & Fourr.) Rouy & Foucaud, also *A. Absinthium* L., the last being the only member of the genus that is established and thriving.

For the past two years many plants in a portion of this place have been killed by the fumes of an acid factory while those that survive are badly seared and burned by the deadly gases.

Waterbury, Connecticut.

Castanea pumila in eastern Massachusetts.— I am surprised to hear from Prof. Fernald that there is apparently no published record of the occurrence of *Castanea pumila* (L.) Mill. in the Stony Brook Metropolitan Reservation in Boston. Two clumps of this southern dwarf chestnut have been known there for at least fifteen years.

I have forgotten to whom belongs the credit of first discovery, but I am inclined to think the station was first found by Prof. John G. Jack of the Arnold Arboretum, who accompanied a party of botanists bent on collecting this plant, so rare in our neighborhood, on June 26th, 1897. We found the two clumps some two hundred feet apart from each other, and in fine flower at that time. They were growing a few feet from a rough cart road on a dry, sandy hillside, among dwarf oaks. On October 2nd, 1898, I secured some fine fruiting specimens. I have not visited the station since 1904, at which time it was still thriving. How this *Castanea* got started in this spot is a mystery. It is very seldom cultivated, and none of it was known to exist in the neighborhood at the time we first saw it. The place where it is growing, moreover, was remote from habitations and gardens, and seldom visited prior to the establishment of the Stony Brook Reservation in the late nineties, except by small boys in pursuit of mud turtles and pickerel in the pond near by.— E. F. Williams, Cambridge, Massachusetts.

Winter Meeting, Josselyn Botanical Society of Maine.— About thirty people interested in Maine plants attended the Josselyn Society meeting held in Portland, at the rooms of the Portland Society

of Natural History. Friday evening, Feb. 24, Prof. K. M. Wiegand spoke on Character in Winter Buds, illustrating his talk with specimens of various twigs. Prof. J. F. Collins spoke of the six species and two varieties of *Polytrichum* known in Maine. Dr. L. W. Riddle described lichens, and talked of their distribution in Maine. The State furnishes a large field, in which comparatively few extensive collections of lichens have been made.

Saturday morning, Feb. 25, the society took a three-mile walk on Cape Elizabeth. Among the species noted were *Prunus maritima* Wang., *Cynanchum nigrum* (L.) Pers., true *Eupatorium purpureum* L. (new to Maine), an interesting *Carya*, and the prostrate shore form of *Juniperus virginiana* L. Dr. Riddle collected about 30 lichens, the most interesting of which were the coastal *Cladonia reticulata* (Russell) Wainio, and the southern *Usnea trichodea* Ach.

Saturday afternoon Prof. M. L. Fernald showed specimens and described many recent additions to the Maine flora. Mr. C. H. Knowlton talked about the boreal flora of the Washington county coast, showing numerous specimens classified by habitats as woods plants, beach and marsh plants, species of the rocky headlands and of the peat bogs.

Eight new members were elected to the society. The summer meeting will be held at Brunswick, Aug. 22–25. C. H. Knowlton, Hingham, Massachusetts.

Plants in Flower February 8, 1911, at Clemson College, South Carolina.— Upon various collecting trips about Clemson College, South Carolina, about thirty miles from the main range of the Blue Ridge Mountains, in the western part of the state, the following plants were collected in flower upon the above date: *Acer rubrum, Alnus rugosa, Arabis virginica, Capsella Bursa-pastoris, Hepatica triloba, Lamium amplexicaule, Prunus Persica,* and *Stellaria media.*

All of these with the exception of maple and peach have been in full flower for three weeks and more, and besides those mentioned there is a large number of exotic plants in flower out of doors.

A more interesting observation than these, in all probability, is the occurrence of *Hepatica,* which grows only upon the northern or cooler slopes of the hillsides here, in flower upon November 12, 1910 in this neighborhood. Of course the season for January here was much

warmer than usual with that month but we thought that readers of Rhodora would be interested to hear of these unusual periods of flowering.— John G. Hall & A. B. Massey, Clemson College, South Carolina, February 8, 1911.

Glyceria acutiflora in Vermont.— Last season I found two small stations near this city for *Glyceria acutiflora* Torr., a grass not heretofore reported for Vermont. The first station was at the border of a small low pond, where the new grass was mingled with *G. borealis* (Nash) Batchelder, the latter greatly predominating. As I had been to the same spot many different seasons and had not noticed *G. acutiflora*, I am led to believe that it probably occurs more frequently than is supposed, but has been overlooked because of its resemblance, at a casual glance, when growing, to *G. borealis*. A few weeks subsequent to the finding of the first station I saw the grass again, a few plants growing along a brook in an alder swamp about two miles from the initial station. The brook and pond waters have no connection.— George L. Kirk, Rutland, Vermont.

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